

REMARKS

The application has been reviewed in light of the Office Action dated June 14, 2005. Claims 12-23 were pending. Claims 1-11 were previously canceled, without prejudice or disclaimer. By this Amendment, claims 13, 16, 19 and 22 have been canceled, without prejudice or disclaimer, new independent claims 24 and 25 have been added, independent claims 12 and 14 have been amended to clarify the claimed invention, and claims 18 and 20 have been amended by rewriting them in independent form. Accordingly, claims 12, 14, 15, 17, 18, 20, 21 and 23-25 are now pending, with claims 12, 14, 18, 20, 24 and 25 being in independent form. Support for the claim amendments can be found in the application at, for example, page 5, lines 1-5, page 10, lines 16-18, and page 21, lines 10-14.

Claims 12-17 were rejected under 35 U.S.C. §102(e) as allegedly purportedly anticipated by U.S. Patent No. 6,428,160 to Roy et al. Claims 21-23 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Roy in view of U.S. Patent No. 6,523,948 to Matsumoto et al.

Applicant has carefully considered the Office Action and the cited art, and respectfully submits that independent claims 12 and 14, as amended, are patentable over the cited art, for at least the following reasons.

This application relates to ink-jet recording in which heat is applied to a printed surface of a recording medium, without contacting the printed surface, to make ink adhere to the printed surface. Applicant devised improved ink-jet recording devices wherein a multi-nozzle recording head (claim 12) or a head unit having a plurality of multi-nozzle recording heads (claim 14) has a long dimension so as to cover the printing range of the recording medium which is conveyed by a conveyance unit to a position at which the nozzle surface of the recording head faces the recording medium. Thus, the recording head remains stationary and the recording medium is moved, and the recording head is able to avoid failure for a longer period of time. Independent

claims 12 and 14 have been amended to clarify these features.

Roy, as understood by Applicant, is directed to an ink-jet printing system wherein slow-drying ink drops are jetted onto paper, and prior to ink penetration into the paper, the water in the droplet is evaporated while still resident on the paper surface.

Roy teaches at column 6, lines 61-63 that the “paper is maintained in a stationary position as printhead assembly 60 is moved.” Since the printhead in the ink-jet printing system of Roy is repeatedly moved, it is more susceptible to failure (and therefore is less reliable) than the multi-nozzle recording head of the claimed invention of claims 12 and 14 of the present application.

Applicant does not find teaching or suggestion in Roy of an ink-jet recording device wherein a multi-nozzle recording head (claim 12) or a head unit having a plurality of multi-nozzle recording heads (claim 14) has a long dimension so as to cover the printing range of the recording medium which is conveyed by a conveyance unit to a position at which the nozzle surface of the recording head faces the recording medium, as provided by the claimed invention.

Matsumoto, as understood by Applicant, is directed to an ink jet printer wherein plural nozzles are arranged in an ink jet head in an array in a main scan direction, and a thermal head includes plural thermal elements arranged in an array in the main scan direction. Matsumoto was cited in the Office Action as purportedly disclosing an optical LED heater.

Applicant does not find disclosure or suggestion by the cited art, however, of an ink-jet recording device wherein a multi-nozzle recording head (claim 12) or a head unit having a plurality of multi-nozzle recording heads (claim 14) has a long dimension so as to cover the printing range of the recording medium which is conveyed by a conveyance unit to a position at which the nozzle surface of the recording head faces the recording medium, as provided by the claimed invention.

The Office Action stated that claims 18-20 were objected to as purportedly being

dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

By this Amendment, claim 19 has been canceled, and claims 18 and 20 have been amended by rewriting them in independent form. The terms in independent claims 12 and 14 which the Examiner deemed to be a statement of intended use have not been included in amended claims 18 and 20 since the Examiner has stated that they do not further limit the claims. However, the reasons for the indication of allowable subject matter in claims 18 and 20 still apply to claims 18 and 20 as amended.

In addition, Applicant submits that new claims 24 and 25 are allowable for reasons similar to the reasons that claims 18 and 20 are allowable.

In view of the amendments to the claims and remarks hereinabove, Applicant submits that the application is now in condition for allowance. Accordingly, Applicant earnestly solicits the allowance of the application.

If a petition for an extension of time is required to make this response timely, this paper should be considered to be such a petition. The Office is hereby authorized to charge any fees that may be required in connection with this response and to credit any overpayment to our Deposit Account No. 03-3125.

If a telephone conference could advance the prosecution of this application, the Examiner is respectfully requested to call the undersigned attorney.

Respectfully submitted,


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